COOPERATION OF THE BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE WITH PEST CONTROL OPERATORS

by

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It is a pleasure to be present at the Fifth Annual Convention of the National Pest Control Association as one of the representatives of the Bureau of Entomology and Plant Quarantine. I welcome this opportunity, not only because it permits me to learn more of the splendid work that is being done by this organization for the betterment of the industry, but also because it enables us to publicly and officially participate in an active way in that work. The work of the members of the National Pest Control Association is dependent in no small degree upon the accomplishments of the members of the Bureau of Entomology and Plant Quarantine and by the same token, the Bureau is, in a measure at least, dependent upon the work of the pest control operators. It goes without saying that when the pest control operators efficiently carry out their work as it relates to insects, they have demonstrated in the most effective way possible the value of the research work conducted by the Bureau and other research institutions. The information made available by the work of the Bureau of Entomology and Plant Quarantine through its publications and research work has in reality formed to a far greater extent than most of us realize perhaps, the basis upon which has been built a large part of the success of your present-day operations. The basic work with the fumigants, which play an important part in the work of many pest control firms, was done by the Bureau. The value of hydrocyanic acid gas, carbon disulphid and carbon tetrachloride in fumigation was established by the research of the Bureau. The relatively new and now widely used ethylene dichloride-carbon tetrachloride fumigating mixture, and the mixtures of carbon

dioxide with ethylene oxide and methyl formate were the direct result of the research work of the Department of Agriculture and furnished pest control operators for the first time with fumigants free from the fire and explosion hazard and at the same time reasonably safe from the standpoint of toxicity to man when used as directed in connection with insect extermination.

Through scientific research, methods have been developed for the control of many pests which belong in the general classification of insects that threaten the health and comfort of man and the preservation of his home and personal belongings so that means of control which are pretty well standardized are available and are in common use. These means of control are not being widely used by home owners for their own application for a variety of reasons, many of which are concerned with hazards in their use and difficulties in their application. You are able to solicit business with confidence that you have at your command information and facilities to permit you to sell your services on the basis of satisfactory results where conscientious methods are employed with the understanding, of course, that infestations by most kinds of insects common to households cannot be definitely and permanently prevented and are subject to recurring seasonal appearances. In spite of this, the need for additional investigations is apparent everywhere and such investigations can be carried on either by public or private agencies. Pest control operators as a group are not essentially investigators but are applying methods developed by investigators. The Bureau is continuing in its investigational work, much of which is designed to develop ways of preventing insect infestations. Should these studies be successful with relation to household insects, the problem of controlling insects in dwellings would be materially lessened. We are urging the construction of buildings so as to prevent termite damage. We are cooperating with various state agencies and industrial concerns in developing methods of treating cereal products so as to prevent infestation either during manufacture or in storage and thus

eliminate the possibility of infestation of these products in the home, restaurant, hospitals, etc. Similar work is also going on in connection with insects attacking dried fruits. Studies are again being undertaken in developing methods of treating fabrics so as to prevent their destruction by insects with the idea that this treatment will be applied in the manufacture of products and thus eliminate the need for control of insects such as the clothes moth and carpet beetle in households. Progress is being made along these lines and the outlook is hopeful. However, if we are fully successful, which is a great deal to hope for, the exterminators or pest control operators would need to have no fear for the future because there would still be plenty of pests on which to operate.

Among the household pests which have attracted widespread interest and caused substantial losses to property owners are the wood-destroying types of insects, one of the principal destructive forms being termites. Advantage has been taken frequently by pest control operators of the presence of swarms of winged ants, of evidences of decay in wooden portions of dwellings and other buildings and of other similar evidences to promote termite control operations without definite assurance that they are actually the cause of the injury. Another instance, not directly related but indicating some of the things which happen, comes to mind. A salesman presented himself to a housewife and handed her a publication of the Bureau on the control of clothes moth, saying that he had a device which was endorsed by the Bureau which would enable the housewife to keep moths out of her carpets. This was his approach to a demonstration of an ordinary vacuum cleaner.

One of the complaints that frequently reaches the Bureau on termite damage is the lack of permanency in treatments of many of the commercial concerns. Even though a five-year guarantee may have been given the home owner, he objects to methods which are not fully effective and that require him to be subjected to

the annoyance of repeated applications of the treatment often within the time covered in the guarantee. Inspection of infested properties that has been made by the Bureau affords convincing evidence in too many cases that the lack of effectiveness in treatments given is due to inefficient work. The best interests of the pest control operators demand that they face this condition by giving more conscientious operation or that they provide better supervision of the jobs or that they support the movement for some form of regulation which will drive the unscrupulous operator from the field.

As you doubtless know, we are cooperating with Great Britain in the study of wood preservatives for termites. Cooperative experiments are being carried on by this country in a number of places including Barro Colorado Island, Panama Canal Zone, Louisiana, North Carolina, Maryland, New York and Hawaii and by Great Britain in South Africa, Australia, and India. Timbers treated with promising materials in this country are sent to these foreign laboratories and are subjected to tests. Preservatives developed there are applied to timbers which are sent to this country and subjected to tests under conditions existing here. These experiments are necessarily time consuming and progress which is being made along the line of developing wood preservatives of a known period of effectiveness can only be concluded after the timber becomes infested, giving the total length of life under the conditions of the experiment. For certain types of treatments such as preventing termite infestations around foundations of houses, it is believed that an effective period of at least five years is necessary. For wood preservatives such as used in posts, poles, and cross ties, an effective period of at least 10 or even better, 20 years is desirable and should be required.

The research program of the Bureau in connection with termite control and prevention consists of the development of wood preservatives, previously

mentioned, the development of soil poisons which is now being carried on in this country at stations in Maryland, New York, and Louisiana and cooperation with pest control operators in order that observations may be made of various methods of treatment which carried on over a period of years may aid in collecting information which will point toward the most effective methods of termite control under actual operating conditions.

Termite proofing is an important item in all building construction. It is receiving attention in the drawing up of specifications of large buildings and is recognized as a part of good building practice. However, it is not being followed in the smaller type of building, particularly residential property, to the degree which its importance justifies. The Government building specifications usually include provision for construction that is termite proof wherever possible. Termite proof construction is good common sense construction and does not involve any unusual or difficult practices in the building trade. Construction of buildings until recently did not take termite prevention into consideration and many property owners are now being called upon to pay for work in termite control which could have been prevented in a large measure by the application of termite-proofing methods of construction.

There has been prepared in the Bureau during the past year a general bulletin relating to insects found in houses. Information in the bulletin covers the more common pests sent from homes to the Bureau for identification. The manuscript is well illustrated and should be very serviceable to exterminators when finally published.

In your field of controlling those pests affecting man in his habitation, the distribution of poisonous materials and the liberation of deadly and inflammable gases in crowded sections of the largest centers of population in the country as a matter of daily routine involve the responsibility with respect

to lives and property of serious proportions. Such a calling demands the cooperation of health officials, fire prevention agencies, insurance underwriters and police departments which in itself could only be gotten and kept through careful and skillful application of scientific methods of operation. Carrying such a burden of responsibility, it is no wonder you have organized yourselves into the National Pest Control Association. You need the representation you get through organized effort and you need the coordination of activities to maintain public good will for an undertaking so hazardous, even though the service you render is essential to public health, comfort and well-being.

We have appreciated the opportunity of working with your organization, and we have had ample reason to be glad of its formation because it has enabled us in the most effective way, in fact the only effective way we have, to deal with the more or less unscrupulous methods and advertising used by those who would sacrifice the principles set up to guide your organization to their immediate individual advantage.

While we have no direct authority in the matter, information has been brought to us by your Association of ill-advised and untruthful advertising, and we have been able in many instances to have such unfavorable and unfair advertising removed from telephone directories and certain newspapers and periodicals. For example, an ad appearing in a newspaper naming a proprietary product and announcing it as a "safe, effective, non-inflammable insecticide, 100% active and approved by the U. S. Bureau of Entomology" is absolutely untruthful and was brought to our attention by your Association. Steps were taken through appropriate channels to have the ad suppressed. We should like to go farther in this direction and we are prepared to do so, provided the pest control operators, through this Association or otherwise, will place themselves in position to merit the things we can do.

In all the literature prepared in the Bureau during the past year dealing with such common household pests as clothes moths, bed bugs, ants, carpet beetles, cockroaches and silverfish, the Bureau of Entomology and Plant Quarantine is definitely calling the attention of the public to the availability of the services offered by professional pest control operators. The manner in which this is being done is indicated in the following quotation from the Bureau's recently prepared leaflet on bed bugs which is about to come from the press. These three references are: Hydrocyanic acid gas "should be used only by a well-informed person, preferably by a professional fumigator or exterminator;" "professional insect exterminators can fumigate with safety individual rooms in congested areas with one of the reasonably safe mixtures of carbon dioxide with ethylene oxide, methyl formate or methyl bromide;" sprays "must be brought into contact with the bugs and to accomplish this nothing is better than power sprayers operated by professional insect exterminators." In all the Bureau's new leaflets now in press, dealing with household pests, such references to the services of the professional exterminator will be found. While the primary interest of the federal Bureau of Entomology and Plant Quarantine is in the householder himself, it is realized that his interest is best served by calling his attention to the availability of the services of dependable insect exterminators. In doing this, we recognize the efforts of those in the industry who are establishing a reputation for fair dealing and for truthful and ethical advertising.

We are frequently urged to endorse some particular proprietary compound or some particular pest control operator. As is well understood by most of the people in the industry, this cannot be done. The work of the Department is supported by public funds and we do not and cannot endorse as such proprietary materials or the work of any individual, single corporation, or concern. The wisdom of this principle is universally recognized. However, it should be possible for the Bureau to indicate to interested people a certain group of licensed

operators or list of reliable firms in the area in which the work is to be done when there has been provided some way to establish the reliability of the individuals or concerns doing the work. It would seem that the time has arrived when the National Pest Control Association should give more consideration to the desirability of state legislation providing for the examination and licensing of pest control operators and pest control operating firms. If this were done, much of the sniping which is found here and there in the industry could be stopped, and the reliability of firms would be established in such way that definite recommendations could be made of groups of reliable firms. There should thus be brought about a condition whereby the sound business methods of operation now forced to meet unfair competition from "fly by night" operators would bring more business to the reliable firms. Unquestionably, there are some firms and individuals in the work who are not properly equipped and who lack much of the basic information needed to carry on efficient pest control work. These firms, if proper legislation and licensing of pest control operators could be brought about, would be removed from the field of competition of legitimate operators. This would not be so greatly different from the way the medical profession has operated for years. There is no reason why pest control operators should not welcome and prosper under the same type of legislation which has proved so beneficial to the medical profession. If this could be done, the Bureau would be in a better position and would welcome the opportunity to recommend licensed operators to people making inquiries, and we do have a large number of inquiries as to pest control operators who can be turned to at times when work is needed by individuals. The Bureau receives from 400 to 500 letters per week from all parts of the country asking for information about household insects, and we thus would have the opportunity to direct the attention of our correspondents to the services of the reliable operators.

It is worthy of notice in this connection that the advice of the Bureau given to Federal Housing Authorities has resulted in the fumigation for the first time of privately owned household goods being removed to federal properties, and certainly some of your membership have benefited by contracts for this service.

It may be also that the pest control operators are not taking the fullest advantage of the field which is offered to them. Your operations are confined pretty largely, in fact I believe almost exclusively, to the treatment of insects affecting the health and comfort of man in his habitation. There are other fields of effort open to the pest control operators. When we consider that there are known to be more than 700,000 kinds of named and described insects in the world; there are some 80,000 kinds so reported in North America north of Mexico, and that of the 80,000 kinds in North America there are estimated to be 10,000 kinds of insects in some way injurious to man, his crops or his possessions, the field becomes greatly broadened. Little or nothing has been done by the professional pest control operator in the control of insects in warehouses, in elevators and other places where grain and field products are stored. Certainly there is a field here which needs more work. It is not too much to assume that the professional pest control operators in even larger numbers than now would eventually go into the field of pest control in orchards and fields on the farms and in the gardens of the homes and estates. Such an expansion of the work of the industry would require the cooperation of all concerned and could certainly be better undertaken if the pest control operators are under examination and licensed by the states. The working out of the necessary uniform laws would require a lot of patience and study; however, merely as a suggestion from one interested in the future success of the work, it is believed well worth while. Anything that the Bureau of Entomology and Plant Quarantine could do to assist in this would be cheerfully done.